

JBL	Journal of Biblical Literature	RA	Revue d'Assyriologie et d'Archéologie orientale
JCS	Journal of Cuneiform Studies	RB	Revue Biblique
JDAI	Jahrbuch des Deutschen Archäologischen Instituts	RdEg	Revue d'Égyptologie
JEa	Journal of Egyptian Archaeology	RGTC	Répertoire géographique des textes cunéiformes (TAVO Beihefte)
JEOL	Jaarbericht Ex Oriente Lux	RHA	Revue Hittite et Asianique
JESHO	Journal of the Economic and Social History of the Orient	RIMA/B	Royal Inscriptions of Mesopotamia, Assyrian / Babylonian Periods
JNES	Journal of Near Eastern Studies	RIME	Idem, Early Periods (Toronto)
JNSL	Journal of North-West Semitic Languages	RIA	Reallexikon der Assyriologie
JRAS	Journal of the Royal Asiatic Society	RQ	Revue de Qumran
JSOT (S)	Journal for the Study of the Old Testament (Supplement)	RSF	Rivista di Studi Fenici
JSS	Journal of Semitic Studies	RSO	Rivista degli Studi Orientali
KAI <sup>2</sup>	Kanaanäische und aramäische Inschriften (Donner - Röllig)	RT	Recueil de Travaux
KTU	Die keilalphabetischen Texte aus Ugarit (AOAT 24)	SAAB	State Archives of Assyria, Bulletin
LÄ	Lexikon der Ägyptologie	SAA(S)	State Archives of Assyria (Studies)
LAPO	Littératures anciennes du Proche-Orient	SAACT	State Archives of Assyria, Cuneiform Texts
LSS	Leipziger semitistische Studien	SAK	Studien zur altägyptischen Kultur
MAD	Materials for the Assyrian Dictionary	SAOC	Studies in Ancient Oriental Civilization
MANE	Monographs on the Ancient Near East	SCCNH	Studies on the Civilization and Culture of Nuzi and the Hurrians
MARI	Mari, Annales de recherches interdisciplinaires	SD	Studia et documenta ad jura orientis antiqui pertinentia
MÄS	Münchener ägyptologische Studien	SMANE	Sources and Monographs from the Ancient Near East
MDAI	Mitteilungen des Deutschen Archäologischen Instituts	SMS	Syro-Mesopotamian Studies
MDOG	Mitteilungen der Deutschen Orient-Gesellschaft zu Berlin	SS	Studi Semitici (Roma)
MEE	Materiali Epigrafici di Ebla (Napoli)	StBoT	Studien zu den Bogazköy-Texten
MHEM/T	Mesopotamian History and Environment, Memoirs/Texts	StEbl	Studi Eblaiti
MIO	Mitteilungen des Instituts für Orientforschung	StOr	Studia Orientalia (Helsinki)
MRS	Mission de Ras Shamra	TAVO	Tübinger Atlas des Vorderen Orients
MSS	Münchener Studien zur Sprachwissenschaft	TUAT (E)	Texte aus der Umwelt des Alten Testaments (Ergänzungslieferung)
MVAeG	Mitteilungen der Vorderasiatisch-Aegyptischen Gesellschaft	UF	Ugarit-Forschungen
NABU(M)	Nouvelles Assyriologiques Brèves et Utilitaires (Mémoires)	UVB	Vorläufiger Bericht über die ... Ausgrabungen in Uruk-Warka
NAPR	Northern Akkad Project Reports	VAB	Vorderasiatische Bibliothek
NEA	Near Eastern Archaeology (continuation of BA)	VDI	Vestnik Drevnej Istorii
OAA (S)	Old Assyrian Archives (Studies)	VT (S)	Vetus Testamentum (Supplement)
OBO	Orbis Biblicus et Orientalis	WAW	Writings of the Ancient World (SBL)
OEAE	The Oxford Encyclopedia of Ancient Egypt (2001)	Wb	Wörterbuch der ägyptischen Sprache WO Die Welt des Orients
OEANE	The Oxford Encyclopedia of Archaeology in the Near East (1997)	WVDOG	Wissenschaftliche Veröffentlichungen d. Deutschen Orientgesellschaft
OLA	Orientalia Lovaniensia Analecta	WZKM	Wiener Zeitschrift für die Kunde des Morgenlandes
OLP	Orientalia Lovaniensia Periodica	YNER	Yale Near Eastern Researches
OLZ	Orientalistische Literaturzeitung	ZA	Zeitschrift für Assyriologie und Vorderasiatische Archäologie
OMRO	Oudheidkundige Mededelingen, Leiden, Rijksmuseum van Oudheden	ZAh	Zeitschrift für Althebraistik
OrAnt(C)	Oriens Antiquus (Collectio)	ZAR	Zeitschrift für Altorientalische und Biblische Rechtsgeschichte
OrNS	Orientalia, Nova Series	ZAW	Zeitschrift für die Alttestamentliche Wissenschaft
OrSuec	Orientalia Suecana	ZÄS	Zeitschrift für Ägyptische Sprache und Altertumskunde
PEQ	Palestine Exploration Quarterly	ZDMG	Zeitschrift der Deutschen Morgenländischen Gesellschaft
PLB	Papyrologica Lugduno-Batava PRU Le palais royal d'Ugarit (MRS)	ZDPV	Zeitschrift des Deutschen Palästinavereins
PSD	Philadelphia Sumerian Dictionary	ZfA	Zeitschrift für Althebraistik

## PRELIMINARY REPORT ON THE LEIDEN EXCAVATIONS AT SAQQARA, SEASON 2003: THE TOMB OF MERYNEITH

MAARTEN J. RAVEN, RENÉ VAN WALSEM, BARBARA G. ASTON, AMANDA DUNSMORE, LADISLAVA HORÁČKOVÁ

### Introduction

The joint mission of the Leiden Museum of Antiquities and the Faculty of Archaeology/Department of Egyptology of Leiden University started its fieldwork in the Saqqara New Kingdom necropolis on January 15th and continued until February 26th, 2003. The staff consisted of Dr Maarten J. Raven and Dr René van Walsem (field directors), Dr Barbara G. Aston and Ms Amanda Dunsmore (ceramicists), Dr Jacobus van Dijk (epigraphist), Dr Ladislava Horáčková (anthropologist), Drs Willem Beex (surveyor), Mr Peter Jan Bomhof (photographer), Ms Dorothea Schulz (draughtswoman), Mr Maarten Horn and Mr Leo Smole (field assistants). Prof. Geoffrey T. Martin (honorary director) carried out work in the Cairo Museum on behalf of the expedition, copying New Kingdom reliefs from the Saqqara necropolis.

The fieldwork was carried out in close collaboration with Mr Ahmed el-Haggar (Director of Saqqara) and his successors Mr Atef Abu-el-Dahab (General Manager of Saqqara) and Dr Abderrahman el-Aidy (Manager of Saqqara), and was supervised by Mr Kamal Wahid (Inspector of South Saqqara) and in the field by the Inspector Mr Samir Abdelalim el-Sayed Abdallah. The Expedition wants to express its gratitude to Dr Zahi Hawass (Secretary General of the Supreme Council of Antiquities), Mr Magdy el-Ghandour (Chairman of the Department of Foreign Missions), to the members of the Permanent Committee of the SCA, and to Dr Mamduh el-Damaty (Director of the Cairo Museum). As usually, we have to thank the Director and staff of the Dutch-Flemish Institute in Cairo (NVIC) for all their help and hospitality. The Egypt Exploration Society again granted us the use of the Saqqara dighouse. Financial and logistic support was received from the Netherlands Organization for Scientific Research (NWO), Dr Karel Innemée (Deir Musa el-Eswed excavations), Archaeological Research and Consultancy in Groningen, the Bloomsbury Academy (London), and numerous donors of the Society of Friends of the Leiden Museum.

The work of the Dutch mission was again concentrated on the tomb of Meryneith, Greatest of Seers of the Aten, which was discovered in 2001<sup>1</sup>. The objectives of the present season

<sup>1</sup> For the seasons 2001-2002, see M.J. Raven, R. van Walsem et al., Preliminary report on the Leiden excavations at Saqqara, season 2001: the tomb of Meryneith, *JEOL* 37 (2001-2002), 71-89; M.J. Raven, R. van Walsem et al., Preliminary report on the Leiden excavations at Saqqara, season 2002: the tomb of Meryneith, *JEOL* 37 (2001-2002), 91-109. See also M.J. Raven, Het graf van Meryneith en een nieuw koningsgraf, *Archeobrief Stichting voor de Nederlandse Archeologie* 24 (herfst 2002), 13-15; M.J. Raven, Les fouilles de Leyde dans la tombe de Meryneith à Saqqara, Campagnes 2001-2002, *BSFE* 155 (Octobre 2002), 11-31; R. van Walsem, The tomb of Meryneith, Excavations at Saqqara, in: *Newsletter Research School of Asian, African and Amerindian Studies Universiteit*

were to carry out a limited number of sondages for a better understanding of the architectural development of the tomb, to clear the backlog in recording of the pottery and skeletal material found in previous seasons, and to continue the facsimile copying of wall reliefs, inscriptions, and paintings. Otherwise, a test trench was started due west of the tomb, and full excavation was carried out of a shaft partly emptied in 2000. The results of these various tasks will be described in the following sections.

#### *Sondages along the exterior walls*

In 2002, trenches were already cut along the sidewalls of Meryneith's inner courtyard. North of the tomb, quite a number of later shafts were found, whereas in the south the remains were cleared of a limestone chapel with an adjacent floor level of *tafl* running all along towards the east<sup>2</sup>. Now, this *tafl* floor was largely removed in order to inspect the foundation of the tomb's south wall (Fig. 3). At the foot of the wall, the bricks are covered with a 1-1.5 cm thick layer of mud plaster, with a horizontal outward curve indicating the original level of the stratum of sand and rubble protecting the lower one or two courses of bricks. This situation is very similar to that of the south exterior wall of the tomb of Horemheb, revealed during the seasons 1999-2000<sup>3</sup>, except that Meryneith's wall was not white-washed (Fig. 4). The foundation of the wall consists of pebbles, limestone chunks, *tafl*, and a few New Kingdom sherds.

About 15-30 cm under this foundation, a mud floor of 4 cm thick was found (feature 2003/9), which proved to rest on a circa 10 cm thick and very compact layer of orange sand, pebbles, and limestone chips covering the virgin desert surface (Fig. 5). The same floor level was found in a test pit outside the north wall of Meryneith's inner courtyard (between shafts 2002/10 and 2002/20), and in a sondage in the courtyard itself, due west of the main shaft (Fig. 6). Thus this floor, which clearly pre-dates the New Kingdom tomb, extends for at least 13 m north-south. Although unequivocal proof such as potsherds or inscriptions are still lacking, it seems plausible to connect the floor with the Archaic Period phase of the site, when there seems to have been a royal tomb in this location<sup>4</sup>. It may represent all that is left of the royal tomb's superstructure, and may be compared with the levelled and clay-plastered surface (in that case bordered by a stepped construction) discovered above the galleries of Ninetjer nearby<sup>5</sup>.

The trench along the south wall was extended beyond the eastern chapels of the tomb to the end of the forecourt (see below), in order to relieve the pressure of the sand on the exterior

Leiden, The Netherlands, Newsletter 22 (2002), 47-51; R. van Walsem, A priestly and a royal tomb at Saqqara: the tomb of Meryneith (2<sup>nd</sup> season), *idem*, 23 (2003), 49-53; R. van Walsem, A second dynasty royal tomb beneath the New Kingdom tomb of Meryneith at Saqqara. Excavation seasons 2001-2002 (to appear in French), *ArchéoNil*, 12 [in print].

<sup>2</sup> Cf. M.J. Raven, R. van Walsem et al., *JEOL* 37 (2001-2002), 92, 94.

<sup>3</sup> Cf. R. van Walsem et al., Preliminary report of the Dutch excavations at Saqqara, season 2000, *JEOL* 35-36 (1997-2000), 19, pls. 18-19.

<sup>4</sup> As suggested by finds from the central shaft of Meryneith's tomb in 2002; see M.J. Raven, R. van Walsem et al., *JEOL* 37 (2001-2002), 95-100, especially 98-100.

<sup>5</sup> P. Munro, Report on the work of the Joint Archaeological Mission Free University of Berlin/University of Hannover during their 12th campaign at Saqqara, *DE* 26 (1993), 52-54.

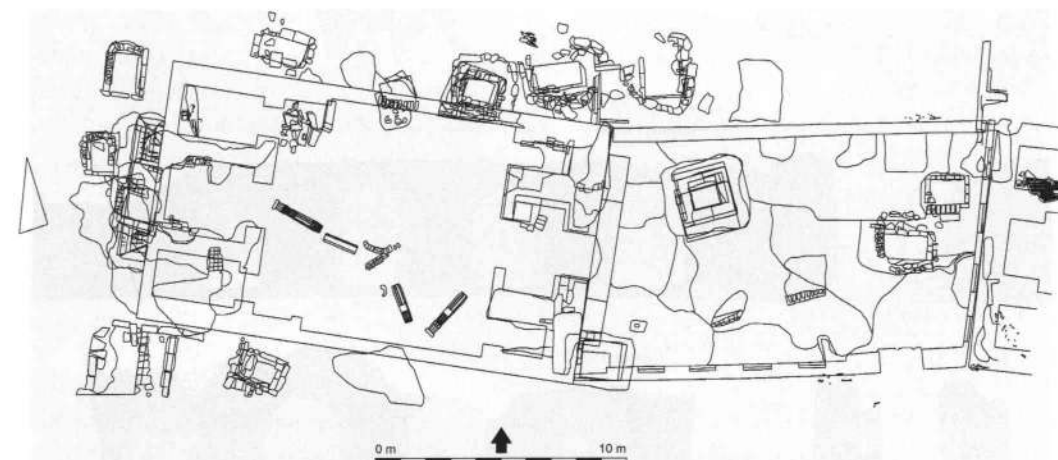


Fig. 1. Plan of the tomb of Meryneith.

walls. A number of shafts (2003/6, 2003/16, 2003/15, 2003/12, from west to east) and surface burials (2003/7, 2003/11, 2003/8, *idem*) were found in this area. Along the north wall of the forecourt a single shaft (2003/17) and one surface burial (2003/18) were revealed. All shafts were left unexcavated for the moment. Only a few loose finds were found, more or less associated with these shafts and burials, of which the most interesting are a small anepigraphic Late Ramesside limestone stela (Fig. 7), the feet of a few blue faience Ramesside shabtis of a scribe Sethnakht, and some fragments of Ramesside faience canopic jars, showing the heads of Amset and Duamutef (Fig. 8). A remarkable limestone block inscribed with a cartouche of Sesostri III and reused in a Late Period shaft may have come from the King's pyramid at Dahshur.

#### *The forecourt*

Due to lack of time, the full extent of the eastern forecourt of the tomb of Meryneith could not be established in the season 2002. At the time, work had to be stopped at a distance of c. 12 m from the tomb's façade, where a protruding pilaster on the south wall seemed to mark its termination<sup>6</sup>. From here, work was now continued both eastwards and northwards. The south forecourt wall proved to have a breach of circa 1.5 m, beyond which it continues for another 1.5 m. Here it forms a straight angle with another wall running north-south; the two walls are not bonded. The breach in the south wall proved to be the main entrance to the forecourt, provided with a limestone doorsill (Fig. 9). It is flanked by two protruding jambs (the west one being identical to the presumed pilaster seen in 2002).

The newly-found east wall of the forecourt is faced with a 2 cm thick layer of mud plaster with traces of whitewash. In front of the plastered face stands a succession of four round-topped niches with rough limestone slabs, very similar to those along the south wall found in 2002 (Fig. 9). In the southernmost niche, the thicknesses of the two lower slabs show remains of Old Kingdom texts and representations in raised relief. The unusual location of the forecourt

<sup>6</sup> M.J. Raven, R. van Walsem et al., *JEOL* 37 (2001-2002), 94 and pl. 5.



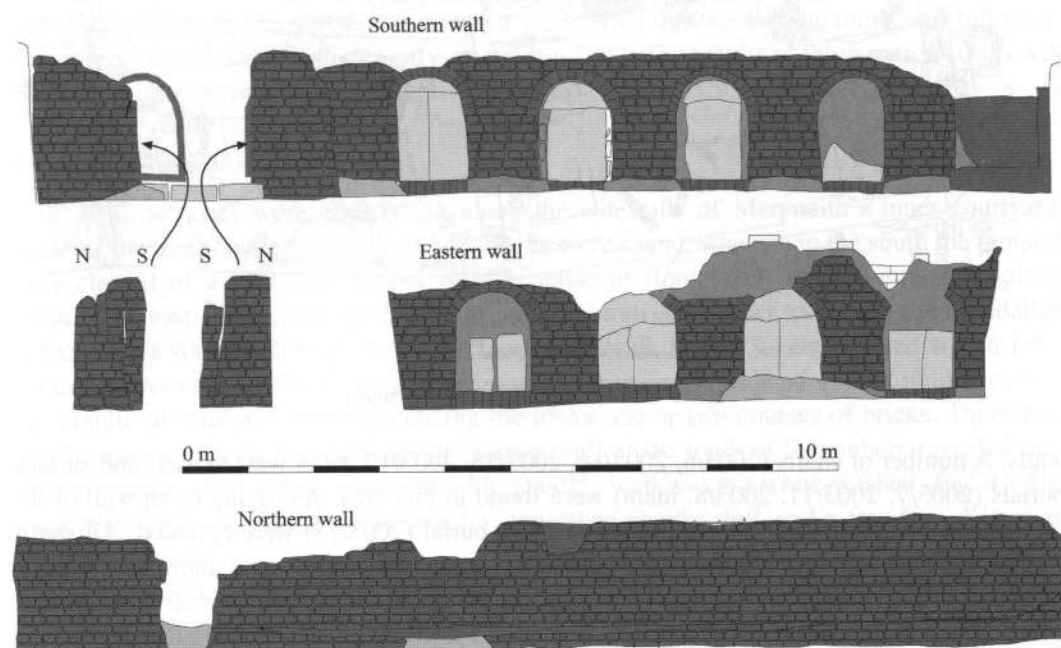


Fig. 2. The walls of the forecourt with the reconstructed niches in the entrance area.

entrance is explained by the fact that this east wall was already there when the forecourt was constructed: it is in fact the west wall of another New Kingdom tomb (2003/14), completely blocking the area east of Meryneith's tomb. The position of this tomb, slightly to the north in relation to the axis of Meryneith's tomb, also explains the puzzling angle of the forecourt walls already noticed in the previous season (Fig. 1)<sup>7</sup>.

The top of the new tomb's west wall was found covered by sand and rubble, above which was a mud-brick wall dating to the Coptic period (2003/3); the latter was only a few courses high and ran along the full width of the courtyard. At its northern end was found a kind of room with a low bench along its west wall (2003/4); its walls, floor, and the seat of the bench show a 2-3 cm thick layer of gypsum plaster. This construction also appears to be a Coptic building, separated by a compact layer of *tafl* from the northern forecourt wall which runs under it to where it abuts tomb 2003/14 (Fig. 9). It was only after the partial removal of these Coptic structures that we could see more of the New Kingdom tomb, notably the contours of its three western cult chapels. In the central chapel were found a fragment of a papyrus bundle column and two loose relief blocks, one of them showing a lady holding a bunch of flowers with strong Amarna influences (Fig. 10). After this, the area was backfilled and protected by a strong drystone wall until further exploration in the future.

<sup>7</sup> O.c., 94.



Fig. 3. Trench outside south wall: left remains of (Archaic?) mud floor (cf. pl. 3), right remains of mud plaster above foundation course of bricks (cf. pl. 2). Note the difference between the weathered top half of the wall and the lower part protected by the *tafl* embankment.

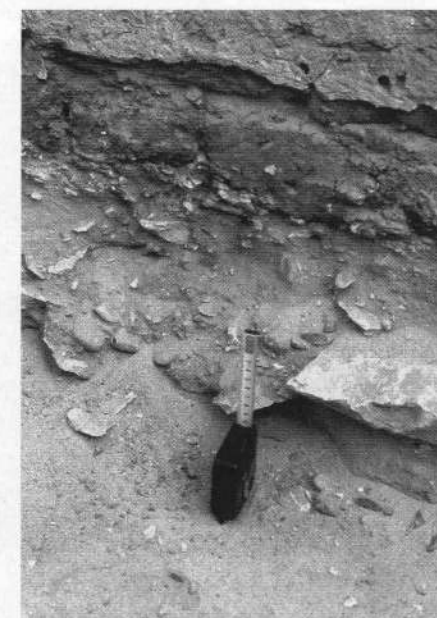


Fig. 4. South exterior wall: close-up of plaster remains above the foundation course of mud-bricks resting on the wall's foundation layer.



Fig. 5. Trench outside south wall: close-up of (Archaic?) floor, looking west, with foundation of the south wall on the right.



Fig. 6. Inner courtyard, sondage west of main shaft, close-up of north profile, showing dark coloured (Archaic?) mud floor under New Kingdom limestone constructions.



Fig. 7. Anepigraphic stela, limestone, Late Ramesside.



Fig. 8. Fragments of canopic jars showing Amset and Duamutef, faience, Ramesside.





Fig. 9. The eastern end of the forecourt, with structure 2003/4 on the left, the doorway (blocked by the expedition) to the right, and the rear wall of 2003/14 (New Kingdom tomb) visible above the two right-hand stelae.



Fig. 10. Relief block depicting lady with offerings from central chapel of 2003/14, limestone, strong Amarna style influences.



Fig. 11. Forecourt, showing mud floor in southwest corner and entrance in southeast corner.

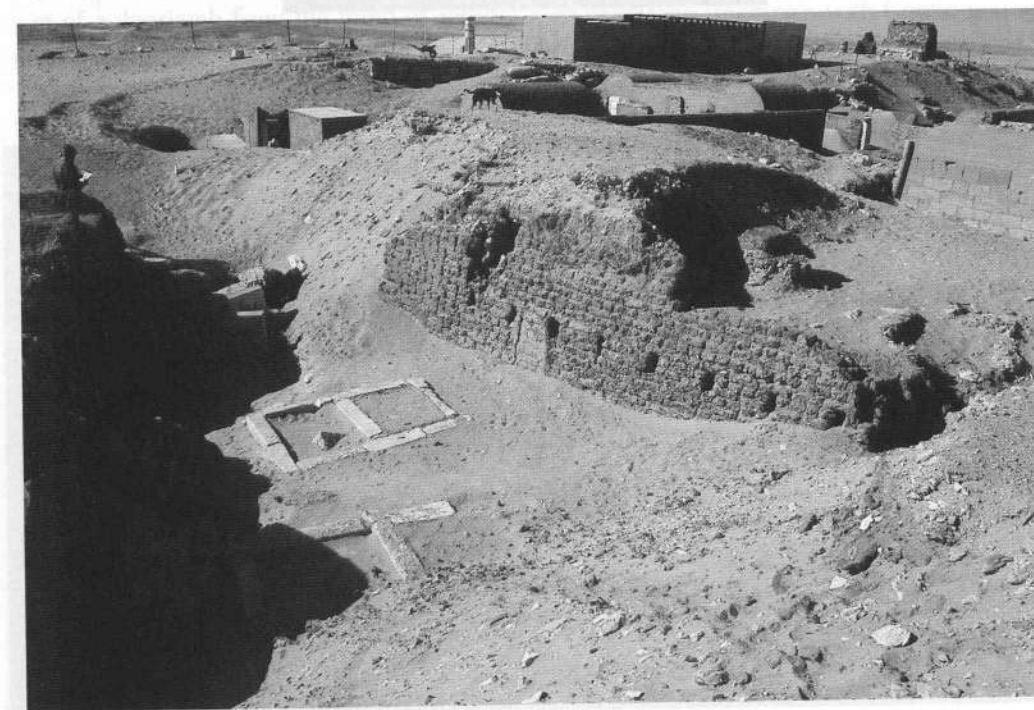


Fig. 12. South wing of first pylon of Horemheb, with stela emplacement of [P]endua to the right of shaft 2002/2, and shaft 2002/4 in the foreground.

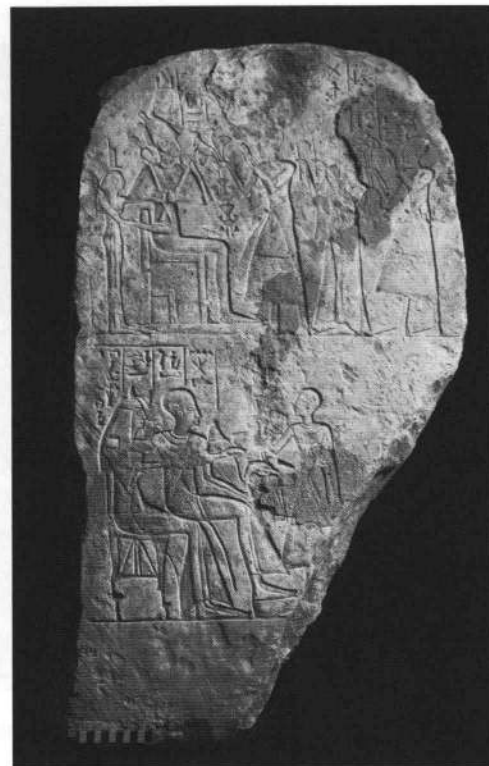


Fig. 13. Stela of [Pe]ndua, limestone, Ramesside.



Fig. 14. Relief fragment from the tomb of Horemheb, showing head of Re-Horakhty-Atum, limestone, found in shaft 99/I.

An analysis of architectural details and stratigraphic features suggests the following construction phases of the forecourt<sup>8</sup>. On the south side, a smooth wall originally bridged the distance of 15.8 m between the façade of Meryneith's tomb and the west wall of its eastern neighbour. At the level of the foot of the wall lies a mud floor, running under the limestone pavement in front of the façade and best preserved in the southwest corner (Fig. 11). The niches against this wall and against the west wall of tomb 2003/14 were built afterwards, since there is no bonding. Thus an L-shaped stela wall was created, while the north side of the forecourt originally remained open. The existing north wall (without niches, Fig. 9) was constructed later, since it is bonded neither with Meryneith's façade nor with the eastern niched wall. Its construction obviously necessitated the construction of a new entrance to the forecourt. This was realised by cutting a secondary doorway through two of the existing stela niches in the south wall, as can still be seen on the east thickness of the present doorway (Fig. 2). Finally, a c. 20 cm thick layer of fine *tafl* and sand, mixed with New Kingdom sherds, was added on top of the already existing mud floor of the forecourt, raising the level to that of the pavement slabs in front of the façade (pl. 9). Its presence explains the remains of un-eroded mud plaster on the lowest course of bricks of the south wall (Fig. 9, right), while its contact surface with the north wall is shown by an erosion groove (Fig. 9, left). Features 2003/19-20 located in the northeast corner (Fig. 1) probably represent shafts without built up walls.

Several relief fragments were retrieved from various levels and shafts in the east part of the forecourt. Some of these display Amarna-style influences, and one could be attributed to the chapel of Iniuiia. Of two Late Period shafts (2002/19 and 2003/5), the latter produced a fragment of a doorjamb from the tomb of Maya<sup>9</sup>. Two limestone fragments with Coptic text are most likely to be associated with feature 2003/3. A concentration of fragmentary Late Period mummies was found over the central chapel of 2003/14 (see the report on the human remains below); possibly, these burials can be associated with the remains of a Late Period pottery cache in the same area (see the report on pottery below). A free-standing mud-brick structure in the centre of Meryneith's forecourt (2001/16) proved to be a Late Period shaft<sup>10</sup>. Its top part was dismantled down to pavement level, in order to facilitate excavation at a later date. Its bricks were used to consolidate several severely damaged spots in the various mud-brick walls of Meryneith's tomb.

#### *Trench between the tombs of Meryneith and Horemheb*

At the end of the season, some work was done in the area immediately to the west of the tomb of Meryneith. Part of this area (its western sector, facing the present pylon of Horemheb's tomb) consists of an ancient dump of the EES-RMO Expedition. In the eastern sector, however, a trench was cut down to the *tafl* layer about 0.5 m above Meryneith's pavement level and flush with the rims of shafts 2002/2 and 2002/4<sup>11</sup>. Here emerged the east façade of an impressive mud-brick wall, running under an angle with Meryneith's west wall

<sup>8</sup> Mainly based on observations by our surveyor, Willem Beex, who will be responsible for the architectural description and analysis in the final publication of the tomb.

<sup>9</sup> Both these blocks were identified by Dr J. van Dijk.

<sup>10</sup> Initially interpreted as Coptic; see M.J. Raven, R. van Walsem et al., *JEOL* 37 (2001-2002), 94 and pl. 5.

<sup>11</sup> *Ib.* 92 and pl. 2.



and already partly uncovered in 2002 (feature 2002/1)<sup>12</sup>. At its northern end is a doorway with limestone jamb, with beyond it a similar mud-brick structure of which only a small part could be excavated. The doorway is exactly in line with that of Horemheb's pylon, and the mud-brick structures flanking it run parallel to that pylon. This suggests that the newly-found construction is in fact nothing else than the first pylon of Horemheb's tomb; the pylon found in 1975 would then be the second one, and the tomb of Horemheb would be even more impressive than hitherto assumed. A mud-brick wall, already discovered in 1975 (Fig. 12)<sup>13</sup>, is almost certainly connecting the south ends of both pylons.

A noteworthy aspect of the east wall of the new pylon's south wing is the row of holes, to be interpreted as air passages rather than as the remains of a scaffold<sup>14</sup>. Between the second and third holes from the south is a shallow plinth and a stela-shaped patch of mud plaster. This has the same dimensions as a crudely cut limestone stela of a certain [Pe]ndua found nearby (c. 1.01 x 0.60 m; Fig. 13)<sup>15</sup>; probably it has to be associated with shaft 2002/2 directly to the east. A striking discovery is that both shafts in this *tafl* floor (2002/2 and 2002/4) are bipartite, with a limestone lintel serving as the central division (Fig. 12). The west half of the latter shaft is still sealed by its original covering slabs, although underneath it appears to be partly empty. Further exploration of this area is planned for 2004, in order to ascertain the exact relationship between the two tombs.

#### Excavation of shaft 99/I

This shaft, situated near the southwest corner of the tomb of Horemheb, was discovered in 1999 and partly excavated in 2000. At 12 m depth a burial chamber (A) with about 80 decayed mummies could be emptied, dated to the Ptolemaic period by the presence of a hoard of 246 coins, but excavation had to be stopped at a depth of 15 m<sup>16</sup>. Now it was resumed and the shaft proved to continue to a depth of 23.30 m, where it has a final tomb chamber (B) of circa 2.25 x 4.55 m (Fig. 15). The chamber is roughly 2 m high and contains a pit of circa 1 x 1 m and 0.85 m deep in its northwest corner. Apart from Late Period pottery (several complete torches, see pottery report below), a few limestone relief fragments were found. One is a corner block showing part of the head of a goddess on one side and part of the head with sun disk of Re-Horakhty-Atum on the other (Fig. 14); in view of its similarity to blocks found in chapel D of Horemheb's tomb<sup>17</sup>, it may very well originate from there. Another block mentions a 'fan-bearer on the right of the king, the mayor [of Memphis?], Djehutyhotep'<sup>18</sup>. The

<sup>12</sup> Although not explicitly mentioned in the 2002 preliminary report (ib.), it is partly visible in the far background on pls. 3 (top left corner) and 5 (centre).

<sup>13</sup> Cf. G.T. Martin, *The Memphite tomb of Horemheb, Commander-in-Chief of Tut'ankhamun, I* (London, 1989), pl. 11, top. lb. 21 it is suggested — quite logically at the time — that it may be part of a neighbouring tomb.

<sup>14</sup> A.J. Spencer, *Brick architecture in Ancient Egypt* (Warminster, 1979), 64 with n. 77, referring to J.D.S. Pendlebury, *The city of Akhenaten*, III, pl. XLVII,1, which is very similar to our wall; cf. also Spencer, o.c., pls. 48,A; 49-50,A, and general index, 152.

<sup>15</sup> Name unknown in this spelling in H. Ranke, *Die ägyptischen Personennamen, I* (Glückstadt, 1935), 112.9.

<sup>16</sup> R. van Walsem et al., Preliminary report on the Saqqara excavations, season 1999, *OMRO* 79 (1999), 22, fig. 2, pls. 2.2, 3.1, 5.2; R. van Walsem et al., *JEOL* 35-36 (1997-2000), 19-20, figs. 1, 3; M.J. Raven, R. van Walsem et al., *JEOL* 37 (2001-2002), 87-88, 101-103.

<sup>17</sup> G.T. Martin, *The Memphite tomb of Horemheb, I*, 125-128, pls. 138-139.

<sup>18</sup> Unknown to B. Porter and R.L.B. Moss (J. Málek, ed.), *Topographical bibliography of ancient Egyptian hieroglyphic texts, reliefs, and paintings, III.2: Memphis* (Oxford, 1981).

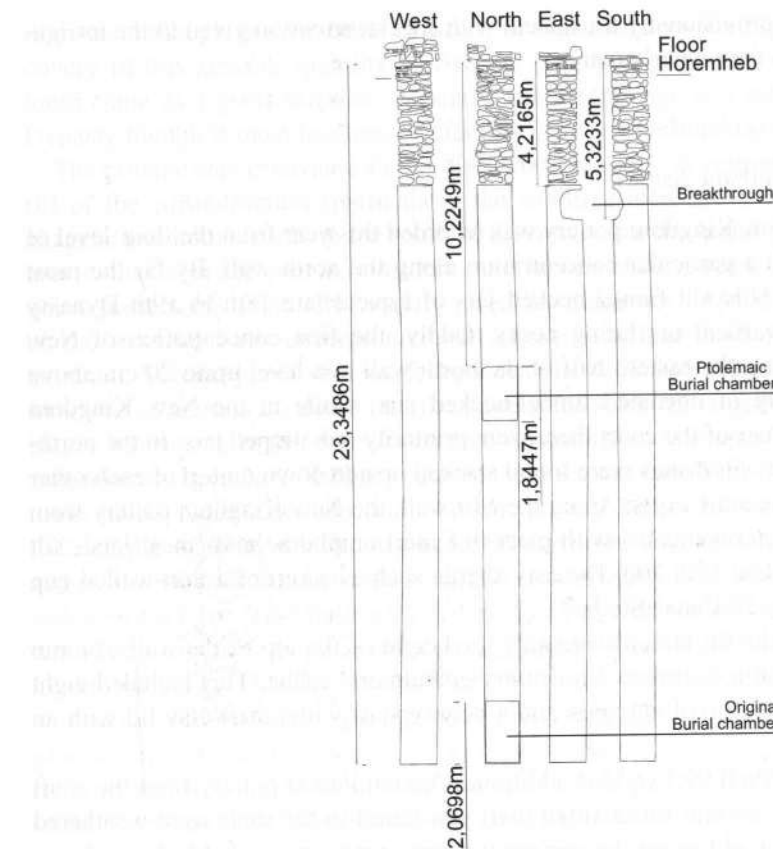


Fig. 15. Shaft 99/I.

remains of a Coptic window-grille were also found. It is still thought that originally this complex was cut out during the Old Kingdom when a *mastaba* may have stood in the area later occupied by the New Kingdom tombs<sup>19</sup>, although only an unfinished false door was found to corroborate this suspicion.

#### Recording of reliefs and paintings

A great amount of drawing of the extant relief decoration of the tomb of Meryneith was already done in the season 2002, with several loose fragments from the tomb and elsewhere also copied. This task was now continued, with the result that all the reliefs remaining on the walls of the tomb of Meryneith have now been copied in facsimile drawings. The same applies for several of the wall-paintings in the four painted chapels of the tomb. Several more loose blocks in the Expedition's site magazine found in the seasons 2001-2003 could be copied. A detailed description was composed for most of the scenes preserved on the tomb walls, and detailed notes were made of the extant colour traces. Finally, all inscriptions from

<sup>19</sup> R. van Walsem et al., *JEOL* 35-36 (1997-2000), 19.

the tomb were studied and provisionally translated, with special attention given to the intriguing corrections executed to the owner's names.

### *Study of pottery*

#### 1. Non-archaic material (Barbara Aston)

A large assemblage of New Kingdom pottery was recorded this year from the floor level of Meryneith's forecourt, with a particular concentration along the north wall. By far the most common vessel type were Nile silt funnel-necked jars of typical late 18th to 19th Dynasty shape with straight-sided vertical or flaring necks. Oddly, the first concentration of New Kingdom pottery found along the eastern half of the north wall at a level up to 20 cm above floor level consisted mainly of uncoated funnel-necked jars, while in the New Kingdom deposit in the northwest corner of the court there were primarily red-slipped jars. In the northwest corner, four red-slipped silt dishes were found stacked upside down on top of each other right in the corner of the forecourt walls. Along the east wall, the New Kingdom pottery from the floor level was more heterogeneous, with pieces of marl amphorae and 'meat jars', silt storage jar rims, and some late 19th-20th Dynasty sherds such as a rim of a thin-walled cup and a shoulder of a Dynasty 20 Canaanite jar.

East of the forecourt, in the fill at approximately the height of the top of the wall of tomb 2003/14, were the remains of a disturbed 5th-century embalmers' cache. This included eight intact or nearly complete small marl-clay jars and a new type of wide, marl-clay lid with an inner ring near the centre.

Resuming excavation of Shaft 99/I yielded additional Persian Period pottery from the shaft itself and from Chamber B. Several intact small marl jars found in the shaft were weathered on one side, indicating they had lain on the surface for some time, and probably formed part of the embalmers' cache found just south of the rim of the shaft in 2000<sup>20</sup>. Many torches were found in the fill of Chamber B and also pieces of a vessel not encountered at our site before, a new variation on the jars with modelled faces of the god Bes. This example has the applied facial features and arms of the typical marl clay version but is made in Nile silt and coated with a pink slip, perhaps in a deliberate imitation of its marl counterpart.

Sherds of two Greek and one Mycenaean vessel were also recorded from the surface fill east and south of the forecourt. The Mycenaean stirrup jar has a shoulder pattern of circles enclosing a ring of dots which is new to our Saqqara corpus. The Greek vessels are small, one-handled jars, one black-glazed and the other black-on-red ware with a decoration consisting of a net pattern with white dots at the intersections.

#### 2. Archaic material (Amanda Dunsmore)

During this season work began on the recording of the Archaic pottery from the tomb of Meryneith. This assemblage represents the first group of Archaic pottery found in the southern New Kingdom necropolis at Saqqara. Previously, the earliest pottery found at the site dates to the Old Kingdom, but even these are just occasional sherds which are thought to come out of the mud bricks. No discrete assemblage of Old Kingdom pottery has ever been

<sup>20</sup> O.c., 21, pl. 20.

excavated, though there is other evidence of Old Kingdom tombs in the area. Hence the discovery of this sizeable quantity of Archaic pottery clearly deriving from the 18th Dynasty tomb came as a great surprise. Presently, the assemblage is tentatively dated to the Second Dynasty though it must be stressed that this is only a preliminary assessment.

The pottery was excavated in the 2001-2002 seasons. A certain proportion came from the fill of the superstructure (particularly the southern area above the courtyard, the southern chapels, and immediately to the south of the tomb), but the majority of sherds came from various contexts in the rooms, corridors, and niches underground. It is clear that at a certain point, presumably relatively recently given the discovery of pottery high up in the fill, some of the material from underground was cleared out and thrown to the south of the shaft entrance. Several joins were made between sherds found above ground and from the substructure so there is no doubt that the pottery from the fill is part of the underground assemblage. It seems clear that the substructure was initially cut in the Archaic Period but there has subsequently been New Kingdom activity and a lot of Late Period burials. Unfortunately, virtually all the contexts in which the Archaic pottery was found were greatly disturbed.

Once the material was reconstructed, vessels and diagnostics were divided between silts and marls. Most of the silt vessels were of two jar types. The most commonly occurring type was a storage jar, hand-built with flat base, roughly ovoid body, and a short neck and out-turned rim, turned with the aid of a turning device. Remarkably, two vessels of this type were found intact (Fig. 16). The other silt jar type was a storage jar of comparable size, hand-built with a roughly modeled, pointed base, and a slightly in-turned direct rim with a shallow groove below to indicate the neck; in most examples the rim appears to be turned. Several bases of this type were found and a few rims and upper bodies, but not one complete profile could be reconstructed. The silt storage jars constitute a minimum number of 23 vessels. Eight small silt dishes were also found and four (what appear to be) miniature vessels were found in the fill close to the surface.

Of the marl vessels, the overwhelming majority concerns tall, slender, cylinder jars with round bases, short necks, and out-folded rims. The bodies are hand-built and the necks and rims turned with the aid of a turning device. Each jar also has a ridge around the shoulder and an applied ring around the lower wall, just above the base<sup>21</sup>. A minimum number of 14 cylinder jars may be estimated. Pre-firing pot-marks occurred on the shoulders and upper bodies of five of these jars (Fig. 17). One jar had two pot-marks which appear to be the same mark, one on either side of the vessel. Other marl types were the rim and upper body of two globular jars and the rim and upper body of an ovoid jar. All the marl jars are extremely well made and finished and show a noticeably greater degree of care and/or skill in their manufacture than the silt vessels.

As mentioned, this is the first assemblage of Archaic pottery found in the New Kingdom necropolis, hence, it was necessary to devise new fabric classifications according to the Project's fabric system. The fabric system was originally created by Janine Bourriau and uses the alphabet as its basis. For each major period three letters are taken to represent the silt, marl, and mixed fabrics. P is used for all imported fabrics and covers all periods. The system begins at the Old Kingdom with A for the silt fabrics, but as the Archaic material appeared

<sup>21</sup> M.J. Raven, R. van Walsem et al., *JEOL* 37 (2001-2002), 101, pl. 14.





Fig. 16. Archaic silt storage jar.



Fig. 18. Thoracic vertebrae (Th<sub>9</sub> and Th<sub>10</sub>) of a 50-60 year old man (chamber F) fused together with osteophytes in a single block, other rostral osteophytes are on the ventral side of the bodies of lumbar vertebrae (morbus Forestier).



Fig. 19. Probably tuberculosis-induced changes on the trochanter major of the left femur of an adult male (chamber J). Signs of an inflammatory process are visible also on the femur head (dorsal view).



Fig. 17. Archaic marl cylinder jar, prefiring potmark.

sufficiently different to the Old Kingdom fabrics it was decided to use separate letters for the Archaic fabrics. Accordingly, the letters Q, R, and S were used to denote the silt, marl, and mixed fabrics, respectively. Fabrics were identified using a x10 hand lens and a microscope at x20 magnification. For the silt vessels two fabrics were identified, Q1 and Q2. Q1 was the most commonly occurring fabric and may be compared with Nile Silt C in the Vienna System. All the storage jars and small dishes were made of Q1. Q2 may be compared with Nile Silt B2 in the Vienna System; the four miniature vessels were made of Q2. Two marl fabrics were identified. R1 is the most commonly occurring fabric and may be equated with Marl A1 in the Vienna System. R2 is a sandier fabric than R1 and is less well mixed; it has no equivalent in the Vienna System. The ovoid jar and two of the cylinder jars are made in fabric R2.

Overall, the assemblage is not a large one but, given the amount of disturbance to contexts both under and above ground, a surprising number of vessels and complete profiles could be reconstructed. Very few extraneous body sherds were left after the reconstruction process and the lack of further rims and bases is puzzling, suggesting either that the assemblage could be considered relatively complete or that further intact vessels were removed from the tomb and immediate surrounding area at some point in time.

#### *Study of skeletal remains (Ladislava Horáčková)*

Human skeletal remains studied this season came from two places at the site. The largest number of crates with bones (141) came from burials discovered in Meryneith's tomb in 2002. Because of the fragmental condition of most of the bones, the study was limited only to descriptive features and variations of the skulls, mandibles, pelvises and long bones of both the upper and the lower limbs.

According to these bones, 428 individuals were recognised, of which 94 (22.0%) belonged to immatures while as many as 334 (78.0%) were adults. The number of adults includes 207 (62.0%) males (including specimens classified as probably males), 101 (30.2%) females (including specimens classified as probably females) and 26 (7.8%) sexually undetermined specimens. A similarly large percentage of males was found in tombs dating to the Late Period, i.e. the tomb of Pabes, Khay, Tia and Tia and Ramose<sup>22</sup>, which clearly indicates the existence of a selection process favouring male burials in the shaft.

The number of skeletal remains in individual chambers was different. The largest number of individuals was buried in Chamber B (75 people, i.e. 17.5% of all the people buried in Meryneith's tomb), followed by Chambers F (65 individuals, i.e. 15.2%) and G (63 individuals, i.e. 14.7%)<sup>23</sup>, while Chamber C had only three individuals buried in it (0.7%). Equally varied were the ratios between adults and immatures. The largest percentage of child burials was found in Chambers G (36.5%) and L (36.4%), while Chamber C had only adults buried in it. Of the total number of 94 immatures 51 (54.3%) were younger than 6 years, 31 (33%) were in the 7-14 age range, and 12 (12.7%) in the 15-18 age range. The highest children's mortality rate ascertained in almost all chambers was in the infants I age group, i.e. from

<sup>22</sup> E. Strouhal, L. Horáčková, Human Remains, in: R. van Walsem et al., Preliminary report on the Saqqara excavations, season 1999, *OMRO* 79 (1999), 24-25.

<sup>23</sup> It should be noted that only half of Chamber G was excavated due to the dangerous condition of the roof and walls.

birth to 6 years of age. The only exception was tomb 2002/16, where the number of skeletal remains of the 7 to 14 year-olds (infans II) was twice as high as that of the infans I group. The ratio between males and females buried in the individual chambers was very close to 2:1 in favour of males, including chambers with only a few individuals in them. The only exception was Chamber J where almost the same number of females as males was buried. A more detailed analysis of burials in individual chambers and niches will be included in the final report.

Chamber F held, in addition to isolated skeletal remains, an almost complete skeleton of an adult male<sup>24</sup>. According to a detailed anthropological and medical analysis it was the skeleton of a robust male about 169.5 cm tall with a well-developed muscular relief, who died at the age of 50-60. The skull clearly exhibited characteristic male features. In the norma verticalis it was ovoid in shape, and in the norma occipitalis it was rather tent-like. The obliteration of intracranial sutures and of extracranial sutures, particularly in the C<sub>3</sub> area and the sutura squamosa regions, was fully completed. The frontal teeth of the inferior dental arch exhibited a thick calculus deposit. Crowns of the lower jaw incisors were obliquely abraded labially down to the roots. At the sites of intravitaly lost teeth on the right side of both upper and lower jaws, buccally opened cysts were found in the region of tooth roots. The lower-jaw M<sub>3</sub> showed a defect reaching deep into the pulp chamber. The skull was, according to the cranial index, dolichocranial (long-headed), relatively acrocranial (with high head), with eurymetopic (wide) forehead and euryenic (wide) upper part of the face. The eye sockets were chamaeconcheal (low), and the nose relatively chamaerrhineal (wide). The sternum showed ossified cartilages of the first ribs, which seems to point to a rather advanced age at death. Most of the muscle attachment site structure was rough with ridge-like formations, which are a symptom of muscular strain and/or advanced age.

The spine exhibited changes caused by deformation spondylosis. Starting at the fovea dentis of the atlas, osteophytes 2-3 mm in size were found as far the first thoracic vertebra. Osteophytes reappear at Th 6, and their size increases caudally. The bodies of Th<sub>9</sub> and Th<sub>10</sub> are fused into a single block by a compact osteophyte (Fig. 18). Sizeable (13 to 29 mm long) osteophytes were also found on lumbar vertebrae. The dorsal region of the first sacral vertebra is not connected with S<sub>2</sub>. A layer of compact bone tissue along the cranial edges of the facies auris firmly fused the right sacroiliacal joint. All the above changes are indicative of the diagnosis of morbus Forestier. Almost all larger joints of the limbs, although to a much lesser extent, also showed symptoms of arthrosis. No signs indicative of the cause of death were found on the skeleton.

Various anomalies and pathological lesions were studied which throw interesting light on the health situation of ancient populations at the site of Saqqara. Most pathological lesions were found on the vertebrae and sacral bones (especially spondylosis). Fractures were found most frequently at forearm bones (at ulnae as parry fractures in males, and in women most often as a result of household violence) and at radii (mainly Colles's fractures as a result of a fall onto the palm of the hand). A number of inflammatory changes (osteomyelitis, suspect tuberculosis), congenital diseases (sacralisation of the fifth lumbar vertebra, spondylolysis) and benign tumours (Fig. 19) were also found. Findings of cysts and defects on tooth roots were also relatively frequent. A detailed survey of all pathological findings will be published in the final report.

<sup>24</sup> See M.J. Raven, R. van Walsem et al., *JEOL* 37 (2001-2002), 103, pl. 15.

This season, remains of three individuals designated as burial 2003/7 were also studied. They consisted of an incomplete set of bones of both feet of a child that died at the age of about 8-11 years, thoracic vertebrae of a young individual (12-18 years) and bones of the lower limb of a female of over 40 years of age. Her sacral canal was fully opened (spina bifida, canalis sacralis apertus).

Burial 2003/8 contained a well-preserved upper half of the skeleton of an adult individual. The skull has typical female features. The mandible has both female and male characteristics. The entire surface of all of the maxillary teeth is abraded. All teeth have thick calculus deposits. The incisors of both the right and the left sides, all the molars of the left side of the mandible, and the P<sub>2</sub> - M<sub>3</sub> on the right side were lost intravitaly, and their alveoli are closed. Cranial sutures are completely obliterated internally, and both sagittal and coronal sutures are obliterated externally. The cranial index classifies the individual as dolichocephalic (long-headed) and orthocephalic (with a head of medium height). Most of the bones of the upper limbs were preserved. The skeletal remains belonged to a woman of about 50 years old.

An osteoma (11 mm wide, 11 mm high, 6 mm thick) is located inside the left sinus frontalis where it grows from the medial wall. The round-shaped osteoma has a smooth surface, and it is covered by compact bone. Radiographic and histological examinations would be necessary for a more detailed diagnosis of the bone tissue affected. The right temporomandibular joint was affected by arthrosis. The alveoli of the right canine and the first premolar have cysts (opened externally). Most of the preserved terminal parts of vertebral bodies were eroded and there were osteophytes about 3 mm in size on their ventral margins (spondylosis). There was a healed fracture on the left radius (on the proximal part just under the radial tuberosity).

Finally, the mummified skeletal remains excavated this season east of the forecourt (burial 2003/13) consist of the incomplete remains of 6 adult individuals and 3 immature ones: two males, four females, a newborn, a 3-6 month old child and a 3-4 year old one. A detailed study and a description of these and other skeletal remains are planned for the next season. They were buried under the remains of a papyrus rind mat.

#### Other projects

The architect Nicolas Warner has already drawn a preliminary plan for the restoration of the tomb of Meryneith. The Expedition shall continue the preparations for this restoration project in the course of the coming year, and hopes to start actual construction work during the season 2004. In the meantime, some consolidation work could be done to the tomb, re-using ancient bricks because no new mud-bricks were available locally. All gaps in the exterior walls were temporarily closed by drystone walls in order to keep out unwanted visitors.

Another project closely linked with the Expedition's work at Saqqara is the recording in facsimile drawings of New Kingdom blocks from Saqqara in the Egyptian Museum in Cairo. Prof. Geoffrey Martin started this project in 2001. Thanks to the kind permission of the Museum's Director and staff, he was able to spend another four weeks in the galleries of the museum this season.